

What is claimed is:

1 1. A method for creating a vector representation of a
2 image, the method comprising the steps of:
3 acquiring position information for two nodes of the
4 image from user input;
5 determining a curve sketching a segment of an outline
6 of the image between the two nodes;
7 acquiring position information of a new node on the
8 image from additional user input;
9 determining another curve sketching another segment of
10 the outline of the image between the new node and
11 the node where the previous curve ends; and
12 repeating the determination step until the outline of
13 the image is completely sketched.

1 2. The method as claimed in claim 1, wherein the
2 image is a bitmap image.

1 3. The method as claimed in claim 1, wherein the
2 curve sketching one segment of the outline of the image
3 between two of the nodes acquired from user input is
4 determined by the steps of:
5 determining a vector flow of the image between the two
6 nodes by a tracing algorithm to extract a number
7 of sample points;
8 determining a function describing the sample points by
9 a curve-fitting algorithm; and
10 adopting the function to one describing a cubic Bezier
11 curve.

1 4. The method as claimed in claim 3, wherein the
2 curve-fitting algorithm is Simple Curve Fitting algorithm.

1 5. The method as claimed in claim 1 further
2 comprising smoothing joints of the curves sketching the
3 outline of the image.

1 6. An apparatus for creating a vector representation
2 of a image, the apparatus comprising:
3 means for acquiring position information for pairs of
4 nodes of the image from user input; and
5 means for determining a curve sketching a segment of an
6 outline of the image between each pair of nodes.

1 7. The apparatus as claimed in claim 6, wherein the
2 image is a bitmap image.

1 8. The apparatus as claimed in claim 6, wherein the
2 curve determining means comprises:
3 means for determining a vector flow of the image
4 between the two nodes by a tracing algorithm to
5 extract a number of sample points;
6 means for determining a function describing the sample
7 points by a curve-fitting algorithm; and
8 means for adopting the function to one describing a
9 cubic Bezier curve.

1 9. The apparatus as claimed in claim 8, wherein the
2 curve-fitting algorithm is Simple Curve Fitting algorithm.

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10. The apparatus as claimed in claim 6 further comprising means for smoothing joints of the curves sketching the outline of the image.